STCG TANK SUBGROUP MEETING MINUTES

March 17, 1998

Welcome/Updates (Cathy Louie)

Cathy introduced Mark Ramsay from TWRS Operations as a guest speaker and welcomed him to the meeting.

The facilitator reviewed the action items from the last meeting and the Strawman Annual Calendar of Activities for the Tank Subgroup.

Cathy mentioned some ongoing activities that TWRS is involved in. One is development of the Site Technology Deployment Plan. Another is an effort to highlight technology insertion points related to the FY 1998 technology needs in the TWRS Program baseline.

Cathy provided a summary of the TFA mid-year review that occurred the week of March 9-13. Alex Stone asked why no one from Ecology was invited. Cathy answered that no regulators were invited this year. Seventeen of the 40 TFA technology projects were broken down in detail for technical review. The HTI characterization activities were reviewed, but not the retrieval activities. ASME was funded by EM-50 to participate in these reviews along with the TFA Technical Advisory Group (TAG).

Paul Scott summarized the GAO audit of EM-50 that happened a couple of months ago. The GAO evaluated data obtained from Congressman Bliley's requests on how effective DOE has been. There was evidently a bigger delta here at Hanford than they had expected; our claims of technology deployment appeared to be "pretty soft". Their final report is due in June.

Cathy mentioned that there is Congressional emphasis on near-term deployments of EM-50 technologies. Near-term opportunities exist at Oak Ridge and Savannah River, but not at Hanford, so it is difficult for us to maintain our out-year funding for TFA work. In addition, TWRS recently requested additional funding for saltwell pumping (a TPA milestone that has been missed), which will further impact the HTI budget.

TWRS Characterization and Operations Technology Needs (Mark Ramsay)

Mark started by discussing non-destructive examination of DSTs. TWRS needs a comprehensive view of the state of the tank walls. Last year a magnetic crawler that does ultrasonic inspection was demonstrated. It will be used on AN-107 (one of six tanks that are outside the corrosion specs) this year. This equipment, however, does not look at the knuckle regions and the air slots under the tanks. The proposal in front of the STCG is to look at these regions. FDH also has a performance agreement this

year to further examine the walls with existing equipment. DOE may be standardizing the tank structural integrity guidance that currently exists.

Mark also discussed DST corrosion monitoring. A corrosion probe was installed in AN-107 last year, and instrumentation was hooked up. Funding has just been released to take measurement data. The program needs two probes per tank to confirm the measurements.

TFA Response to TWRS Characterization and Operations Technology Needs (Tom Brouns)

The corrosion probe was supported in part by TFA; they developed a prototype in FY 1996. TFA integrated the Hanford and Savannah River needs for corrosion monitoring. Savannah River is still required to do chemical sampling and analysis. Data analysis from the probe was co-funded with EM-30. This project scored well because it is ongoing work, it benefits two sites, and the EM-30 co-funding is there.

TFA received four or five needs for remote inspection of tanks. There should be some synergy across the Complex to meet multiple sites' needs. TFA has developed and tested two technologies to date, and they will be demonstrated at Idaho this year. In fact, Hanford and Idaho submitted a TDI proposal on this technology. DOE and Ecology decided to continue discussions offline regarding whether these activities will meet regulatory requirements to support the DST RCRA Part B Permit.

Vince Panesko stated that when we do the next round of technology needs, we should review the status of TFA activities in their MYWP. The EM-50 programs are more integrated now. TFA will check with FETC Industry Programs to see if technology is already available before they do any technology development activities.

Update on Vadose Zone Partnering Activities (Barbara Harper)

Barbara summarized the TWRS Vadose Zone Partnering effort (not the BHI integration effort). David Shafer is the DOE point of contact. Members from the three Tribes, the State of Oregon, and Ecology all participate. It is going slowly as the group is trying to figure out what it can do. The focus is on vadose zone work, mainly the soil under the tanks in the 200 Area. The group is now developing a Program Plan, and then they will work on a Characterization Implementation Plan. They are trying to decide whether the Program Plan should be decision-based, science-based, or requirements-based. They may have a draft Program Plan by April or May.

The ER Program and the TWRS Program both need characterization information. There are data requirements for short-term retrieval (leaks), longer-term closure/post-closure, and model validation. The relevant questions are: What do you need to know? When? What are the impacts if you don't get the information?

Cathy added that the vadose zone work is part of the TWRS performance assessment workscope. It was suggested that perhaps we should be having joint meetings with the Subcon Subgroup on vadose zone activities.

Multi-Sampling Lysimeter (Jim Divine)

Jim works part-time for Ecology and part-time for DOE/Idaho on the Rapid Commercialization Initiative (RCI). The State of Washington is involved in three RCI projects: Solvated Electron Chemistry, Waste Inspection Tomography, and the Multi-Sampling Lysimeter. Ecology's RCI partners include: DOC, DOD, DOE, EPA, Southern States Energy Board, Western Governors Association/ITRC Working Group, and California EPA. The purpose of RCI is to expeditiously move selected technologies to market.

The multi-sampling lysimeter has a draft report available now that Jim is reviewing. Uses for the multi-sampling lysimeter include:

- retrieve soil pore liquids from the vadose zone
- retrieve water samples from the saturated zone
- retrieve vapor samples from the vadose zone
- provide a qualitative assessment of contamination
- rapidly establish boundaries for further characterization.

TWRS Technology Management Plan (Paul Scott)

This topic was postponed until the April meeting. The discussion will include how technology management is incorporated into baseline planning. Paul wants to know how the Subgroup would like to participate in this. He plans to have an annotated outline available next month.

Wrap-Up/Future Agenda Items

As shown on the Strawman Tank Subgroup Annual Calendar, the next meeting will include presentations and discussion on the TWRS waste acceptance, vadose zone, and storage and disposal technology needs and TFA responses.

Action Items

1. Ask Ed Fredenburg for a presentation on the subsurface grout barrier work (Linda Fassbender).
2. Get Ecology and DOE participation for vadose zone discussions in April (Alex Stone and Cathy Louie).
3. Provide TFA mid-year report to Subgroup (Cathy Louie).
4. Ask Jim Nelson for a presentation on the DST corrosion probe (Linda Fassbender).

5. Send comments to Cathy Louie on the TFA responses to TWRS characterization and operations technology needs (everyone).
6. Schedule a joint meeting with the Subcon Subgroup on cryogenic barrier technology from the University of Washington (Linda Fassbender).
7. Update the tank science and technology needs process schedule (Paul Scott).

Meeting Attendees

Gary Ballew (Pacific Rim Enterprise Center)
Tom Brouns (PNNL/TFA)
Jim Divine (Ecology/RCI)
Linda Fassbender (PNNL)
Tom Frater (FDH)
Ken Gasper (LMHC)
Marcus Glasper (DOE-RL)
Barbara Harper (Yakama Indian Nation)
Cathy Louie (DOE-RL/TWRS)
Vince Panesko (Pacific Rim Enterprise Center)
Mark Ramsay (DOE-RL/TWRS)
Paul Scott (FDH)
Alex Stone (Ecology)

Next Meeting

The next meeting will be held on April 14, 1998 from 1:00 to 5:00 p.m. in the ISB-1 White Bluffs Room.